Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A lumped-element diplexer implemented in a multi-layered substrate comprising:

a low-pass filter circuit comprising: ~~wherein circuit elements are disposed on a first series of layers of the multi-layered substrate and wherein a first end of the low-pass filter circuit is connected to a first port and a second end of the low-pass filter circuit is connected to a second port~~

a first capacitor plate disposed on a first layer of the multi-layered substrate;

a second capacitor plate disposed on a second layer of the multi-layered substrate; and

a first inductor plate directly disposed on a third layer of the multi-layered substrate;

a high-pass filter circuit, the high-pass filter circuit comprising: ~~wherein circuit elements are disposed on a second series of layers of the multi-layered substrate and wherein a first end of the high-pass filter circuit is connected to [[a]] the first port and a second end of the high-pass filter circuit is connected to a third port~~

a third capacitor plate disposed on a fourth layer of the multi-layered substrate;

a fourth capacitor plate disposed on a fifth layer of the multi-layered substrate;

a fifth capacitor plate disposed on a sixth layer of the multi-layered substrate; and

a second inductor plate directly disposed on a seventh layer of the multi-layered substrate; and

a ground plane forming a base of the multi-layered substrate, ~~wherein elements of the filter circuits are orientated horizontally with respect to the ground plane and are arranged in layers aligned substantially vertically, these layers being separated by a dielectric material and inter-layer connections being implemented by at least a via~~;

wherein circuit elements of the low-pass filter circuit are disposed on a first series of layers of the multi-layered substrate, a first end of the low-pass filter circuit is connected to a first port and a second end of the low-pass filter circuit is connected to a second port, circuit elements of the high-pass filter circuit are disposed on a second series of layers of the multi-layered substrate, a first end of the high-pass filter circuit is connected to the first port and a second end of the high-pass filter circuit is connected to a third port, elements of the filter circuits are orientated horizontally with respect to the ground plane and are arranged in layers aligned substantially vertically, these layers being separated by a dielectric material and inter-layer connections being implemented by at least a via, and ~~wherein~~ no layer is between an uppermost layer of the first series of layers of the multi-layered substrate and a lowermost layer of the second series of layers of the multi-layered substrate.

2. (Cancelled)

3. (Cancelled)

4. (Previously Presented) The lumped-element diplexer implemented in a multi-layered substrate of claim 1, wherein the circuit elements of the filter circuits comprise inductive elements that comprise plates formed as spirals.

5. (Previously Presented) The lumped-element diplexer implemented in a

multi-layered substrate of claim 1, wherein the circuit elements of the filter circuits comprise at least one inductive element formed on a plurality of layers of the multi-layered substrate.

6. (Previously Presented) The lumped-element diplexer implemented in a multi-layered substrate of claim 1, wherein the circuit elements of the filter circuits comprise at least one capacitive element comprising a plurality of plates formed on a plurality of layers of the multi-layered substrate.

7. (Original) The lumped-element diplexer implemented in a multi-layered substrate of claim 1, wherein the high-pass filter circuit further comprises a low frequency notch filter circuit.

8. (Currently Amended) The lumped-element diplexer implemented in a multi-layered substrate of claim [[3]] 1, wherein at least the third and fifth capacitor plates are dimensioned to have additional overlapping area in order to realize an additional capacitor equivalence.

9. (Currently Amended) The lumped-element diplexer implemented in a multi-layered substrate of claim 1, wherein the ground plane forms a zeroth layer of the lumped-element diplexer.

10. (Original) The lumped-element diplexer implemented in a multi-layered substrate of claim 1, wherein the device is realized in a multi-layered, low temperature co-fired ceramic substrate.

11. (Currently Amended) A lumped-element diplexer implemented in a multi-layered substrate comprising:

a low-pass filter circuit comprising:

a first capacitor plate disposed on a first layer of a first series of layers of the multi-layered substrate;

a second capacitor plate disposed on a second layer of the first series of layers of the multi-layered substrate; and

a first inductor plate directly disposed on a third layer of the first series of layers of the multi-layered substrate;

wherein the first capacitor plate is connected to a first port, the second capacitor plate is connected to a first end of the first inductor plate and to a second port via a third capacitor plate of a high-pass filter circuit of the lumped-element diplexer, and a second end of the first inductor plate is connected to the first port; ~~and~~

a high-pass filter circuit comprising:

a third capacitor plate disposed on a first layer of a second series of layers of the multi-layered substrate;

a fourth capacitor plate disposed on a second layer of the second series of layers of the multi-layered substrate;

a fifth capacitor plate disposed on a third layer of the second series of layers of the multi-layered substrate; and

a second inductor plate directly disposed on a fourth layer of the second series of layers of the multi-layered substrate;

wherein the third capacitor plate is connected to the second port, the fourth capacitor plate is connected to a first end of the second inductor plate, the fifth capacitor plate is connected to a third port and a second end of the second inductor plate is connected to a ground plane of the lumped-element diplexer, and wherein the high-pass filter circuit further comprises a low frequency notch filter circuit realized by additional overlapping area of the third and fifth capacitor plates[[.]] ; and

a ground plane forming a base of the multi-layered substrate, wherein elements of the filter circuits are orientated horizontally with respect to the ground plane and are arranged in layers aligned substantially vertically, these layers being separated by a dielectric material and inter-layer connections being implemented by at least a via;

wherein no layer is between an uppermost layer of the first series of layers of the multi-layered substrate and a lowermost layer of the second series of layers of the multi-layered substrate.

12. (Cancelled)

13. (Previously Presented) The lumped-element diplexer implemented in a multi-layered substrate of claim 11, wherein an inductor plate comprises a spiral-shaped metal strip.

14. (Previously Presented) The lumped-element diplexer implemented in a multi-layered substrate of claim 11, further comprising at least one inductive element formed on a plurality of layers of the multi-layered substrate.

15. (Previously Presented) The lumped-element diplexer implemented in a multi-layered substrate of claim 11, further comprising at least one capacitive element formed on a plurality of layers of the multi-layered substrate.

16. (Previously Presented) The lumped-element diplexer implemented in a multi-layered substrate of claim 11, wherein the ground plane forms a zeroth layer of the lumped-element diplexer.